

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A communications network arrangement providing voice over IP or voice over ATM services, the network arrangement comprising:
  - a first media gateway controller ~~controlling~~ configured to control a first gateway, wherein the first media gateway controller is[[and]] provided with a first operating protocol,
  - a second media gateway controller ~~controlling~~ configured to control a second gateway, wherein the second media gateway controller is[[and]] provided with a second, different operating protocol, and
  - a gateway address translator incorporating proxies for said first and second gateways respectively, wherein said gateway address translator is configured to provide ~~provides~~ a relay function for messaging between each of said first and second media gateway controllers and the corresponding one of the first and second gateways, and a virtual bearer function for messaging between said first and second media gateway controllers.
2. (Previously Presented) A communications network arrangement as claimed in claim 1, wherein said gateway address translator comprises gateway proxies, one for each of said first and second gateways, and virtual gateways, one for each of said first and second media gateway controllers.
3. (Previously Presented) A communications network arrangement as claimed in claim 2, wherein communication between said first and second media gateway controllers is provided via a signalling network.
4. (Previously Presented) A communications network arrangement as claimed in claim 3, wherein said signalling network comprises a Common Channel Signaling 7 network.
5. (Original) A communications network arrangement as claimed in claim 2 wherein said gateway address translator comprises software provided in machine readable form on a storage medium.

6. (Previously Presented) A communications network arrangement as claimed in claim 5, wherein said gateway address translator comprises a software application running on one of said first and second media gateway controllers.

7. (Previously Presented) A communications network arrangement as claimed in claim 1, wherein at least one of said first and second media gateway controllers is constituted by a distributed media gateway controller pair providing separate ingress and egress functions.

8. (Previously Presented) A communications network arrangement as claimed in claim 7, wherein at least one of said first and second media gateway controllers is constituted by a soft switch.

9. (Currently Amended) A gateway address translator for use in a communications network arrangement providing voice over IP or voice over ATM services and ~~comprising~~comprising a first media gateway controller ~~controlling~~configured to control a first gateway, ~~wherein the first media gateway controller is~~provided with a first operating protocol, and wherein the communications network arrangement further comprises a second media gateway controller ~~controlling~~configured to control a second gateway, ~~wherein the second media gateway controller is~~provided with a second, different operating protocol, the gateway address translator comprising[:];

gateway proxies, one for each of said first and second gateways, and  
virtual gateways, one for each of said first and second media gateway controllers, wherein said gateway proxies provide a relay function for messaging between each of said first and second media gateway controllers and the corresponding one of the first and second gateways, and wherein said virtual gateways provide a virtual bearer function for messaging between said first and second media gateway controllers.

10. (Original) A gateway address translator as claimed in claim 7, and comprising software provided in machine readable form on a storage medium.

1 11. (Previously Presented) A gateway address translator as claimed in claim 8, and  
2 incorporated in one of the first and second media gateway controllers.

1 12. (Currently Amended) A method of providing voice over IP or voice over ATM services  
2 in a communications network arrangement ~~comprising~~comprising a first media gateway  
3 controller controlling a first gateway ~~and provided with a first operating protocol~~, and a second  
4 media gateway controller controlling a second gateway, wherein the first media gateway  
5 controller is provided with a first operating protocol, and wherein the second media gateway  
6 controller is~~is~~provided with a second, different operating protocol, the method comprising:  
7 provisioning proxies of said first and second gateways so as to provide a relay function  
8 for messaging between each of said first and second media gateway controllers and the  
9 corresponding one of the first and second gateways, said messaging utilizing the first protocol  
10 between the first media gateway controller and the first gateway, and utilizing the second  
11 protocol between the second media gateway controller and the second gateway, and  
12 ~~to provide~~providing a virtual bearer function for enabling messaging between said first  
13 and second media gateway controllers.

1 13. (Currently Amended) A method of interfacing media gateway controllers and media  
2 gateways having different operating protocols in a communications network arrangement  
3 providing voice over IP or voice over ATM services, the method comprising:  
4 ~~creating, in a computer, software~~ proxies of said media gateways; and  
5 said ~~software~~ proxies in the computer communicating with respective ones of said media  
6 gateway controllers utilizing respective ones of different operating protocols, wherein the media  
7 gateway controllers are provisioned with corresponding addresses of the ~~software~~ proxies rather  
8 than corresponding addresses of said media gateways.

1 14. (Currently Amended) A communications network arrangement providing voice over IP  
2 or voice over ATM services, ~~comprising; and incorporating~~  
3 a plurality of media gateways and a plurality of media gateway controllers configured to  
4 control the corresponding media gateways ~~therefor whereby voice calls are set up over virtual~~  
5 ~~channels in the network~~, wherein said ~~media gateways and media gateway controllers have~~  
6 employ different operating protocols, wherein plural pairs of the media gateway controllers and  
7 media gateways are provided where each of the pairs includes one corresponding media gateway  
8 controller and one corresponding media gateway, and wherein communications between said  
9 ~~media gateways and media gateway controllers are relayed via proxies whereby each pair of said~~  
10 ~~media gateway and media gateway controller sends and receives in each of the pairs includes~~  
11 ~~communications using a corresponding one of the different operating protocols, and wherein the~~  
12 ~~media gateway controllers are provisioned with corresponding addresses of the proxies rather~~  
13 ~~than corresponding addresses of the gateways.~~

1 15. (Currently Amended) ~~Software in machine-readable form provided on a storage medium~~  
2 A machine-readable storage medium storing software to control delivery of voice over IP or  
3 voice over ATM services in a communications network arrangement ~~comprising; comprising a~~  
4 ~~first media gateway controller controlling a first gateway and provided with a first operating~~  
5 ~~protocol, and a second media gateway controller controlling a second gateway, wherein the first~~  
6 media gateway controller is provided with a first operating protocol, and the second media  
7 gateway controller is ~~is~~ provided with a second, different operating protocol, the software  
8 upon execution performing ~~comprising~~:

9 ~~means for~~ provisioning proxies of said first and second gateways so as to provide a relay  
10 function for messaging between each of said first and second media gateway controllers and the  
11 corresponding one of the first and second gateways utilizing the corresponding one of the first  
12 and second protocols, and

13 ~~means for~~ providing a virtual bearer function for enabling messaging between said first  
14 and second media gateway controllers.

1 16. (Previously Presented) The communications network arrangement as claimed in claim 1,  
2 wherein the first media gateway controller is provisioned with an address of one of the proxies  
3 instead of an address of the first gateway, and wherein the second media gateway controller is  
4 provisioned with an address of another one of the proxies instead of an address of the second  
5 gateway.

1 17. (Currently Amended) The gateway address translator as claimed in claim 9, wherein a  
2 first one of the gateway proxies ~~communicates~~ is configured to communicate with the first media  
3 gateway controller using the first operating protocol, and a second one of the gateway proxies  
4 ~~communicates~~ is configured to communicate with the second media gateway controller using the  
5 second operating protocol, wherein an address of the first gateway proxy is provisioned at the  
6 first media gateway controller, and an address of the second gateway proxy is provisioned at the  
7 second media gateway controller.